EMERGE™ PC/PET 9500CR SK

Advanced Resin

Trinseo

Technical Data

产品说明

EMERGE™ PC/PET 9500CR SK Advanced Resin is a polycarbonate blend with excellent chemical and ignition resistance properties. This grade has been tested to ISO 10993 Parts 5 & 10 and is suitable for skin contact applications. It is designed for use in medical equipment housings and other applications that are subject to repeated exposure to a variety of cleaners and disinfectants commonly used in hospitals. This grade has good aesthetics and excellent toughness. It has a UL 94 rating of V0 at 2.0 mm.

Main Characteristics:

- Excellent chemical resistance
- Tested under ISO 10993 (Parts 5 & 10)

Applications:

- Medical device housings or enclosures

总览

特性	• 耐化学品性能，良好 • 韧性良好	• 外观良好 • 阻燃性	
用途	• 电器外壳	• 外壳	• 医疗/护理用品
形式	• 粒子		
加工方法	• 注射成型		
多点数据	• Specific Heat vs. Temperature (ASTM D3417) • Specific Volume vs Temperature (ISO 11403-2)	• Tensile Creep (ASTM D2990) • Tensile Stress vs. Strain (ASTM D638)	• Thermal Conductivity vs. Temperature (ASTM E1530) • Viscosity vs. Shear Rate (ASTM D3835)

物理性能	额定值 单位制	测试方法
密度 / 比重	1.29 g/cm³	ASTM D792
熔流率（熔体流动速率）		ASTM D1238
260°C/5.0 kg	10 g/10 min	
265°C/5.0 kg	13 g/10 min	
收缩率		ASTM D955
流动	0.60 到 0.95 %	
横向流动	0.50 到 0.70 %	
机械性能	**额定值 单位制**	**测试方法**
拉伸模量 [3] (3.20 mm, 注塑)	2330 MPa	ASTM D638
抗张强度 [4]		ASTM D638
屈服, 3.20 mm, 注塑	53.0 MPa	
断裂, 3.20 mm, 注塑	45.0 MPa	
伸长率 [4]		ASTM D638
屈服, 3.20 mm, 注塑	4.1 %	
断裂, 3.20 mm, 注塑	80 %	
弯曲模量 [5] (3.20 mm, 注塑)	2270 MPa	ASTM D790
弯曲强度 [5] (3.20 mm, 注塑)	82.0 MPa	ASTM D790
冲击性能	**额定值 单位制**	**测试方法**
悬壁梁缺口冲击强度 (23°C, 3.20 mm, 注塑)	750 J/m	ASTM D256
装有测量仪表的落镖冲击		ASTM D3763
0°C, 3.20 mm, 注塑, Peak Energy	49.0 J	
0°C, 3.20 mm, 注塑, Total Energy	62.0 J	
23°C, 3.20 mm, 注塑, Peak Energy	45.0 J	
23°C, 3.20 mm, 注塑, 总能量	60.0 J	

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硬度	额定值 单位制	测试方法
洛氏硬度 (R 级, 3.20 mm, 注塑)	110	ASTM D785
热性能	**额定值 单位制**	**测试方法**
载荷下热变形温度		ASTM D648
0.45 MPa, 未退火	109 °C	
1.8 MPa, 未退火	79.0 °C	
维卡软化温度	140 °C	ASTM D1525 [6]
线形热膨胀系数 - 流动 (-40 到 80°C)	7.4E-5 cm/cm/°C	ASTM D696
电气性能	**额定值 单位制**	**测试方法**
表面电阻率	5.2E+15 ohms	IEC 60093
体积电阻率	1.0E+18 ohms·cm	IEC 60093
介电强度		IEC 60243-1
1.60 mm, 在油中	31 kV/mm	
3.20 mm, 在油中	18 kV/mm	
相对电容率		IEC 60250
100 Hz	3.28	
1 MHz	3.12	
耗散因数		IEC 60250
100 Hz	3.0E-3	
1 MHz	0.020	
可燃性	**额定值 单位制**	**测试方法**
UL 阻燃等级		UL 94
1.5 mm [7]	V-1	
2.0 mm [8]	V-0	
2.5 mm [9]	5VA	
灼热丝易燃指数		IEC 60695-2-12
1.5 mm	825 °C	
2.0 mm	960 °C	
2.5 mm	960 °C	

注射	额定值 单位制
干燥温度	121 °C
干燥时间	3.0 到 4.0 hr
加工（熔体）温度	249 到 282 °C
模具温度	43 到 66 °C

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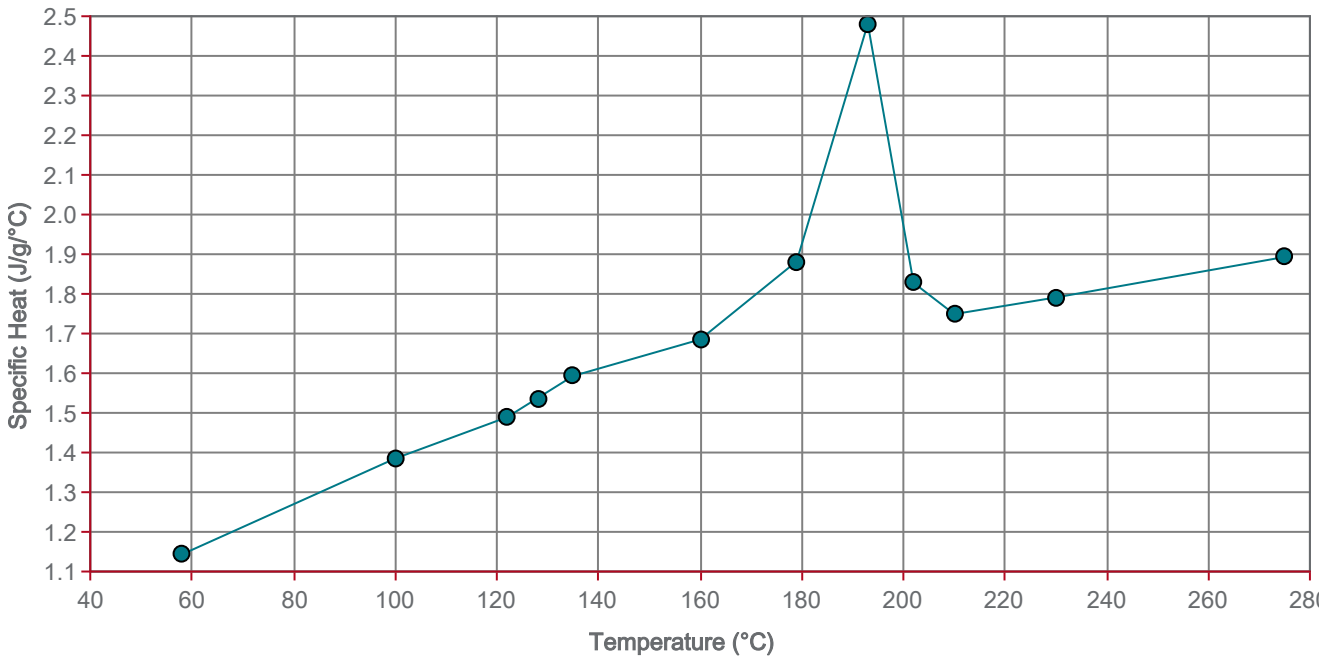
Specific Heat vs. Temperature (ASTM D3417)



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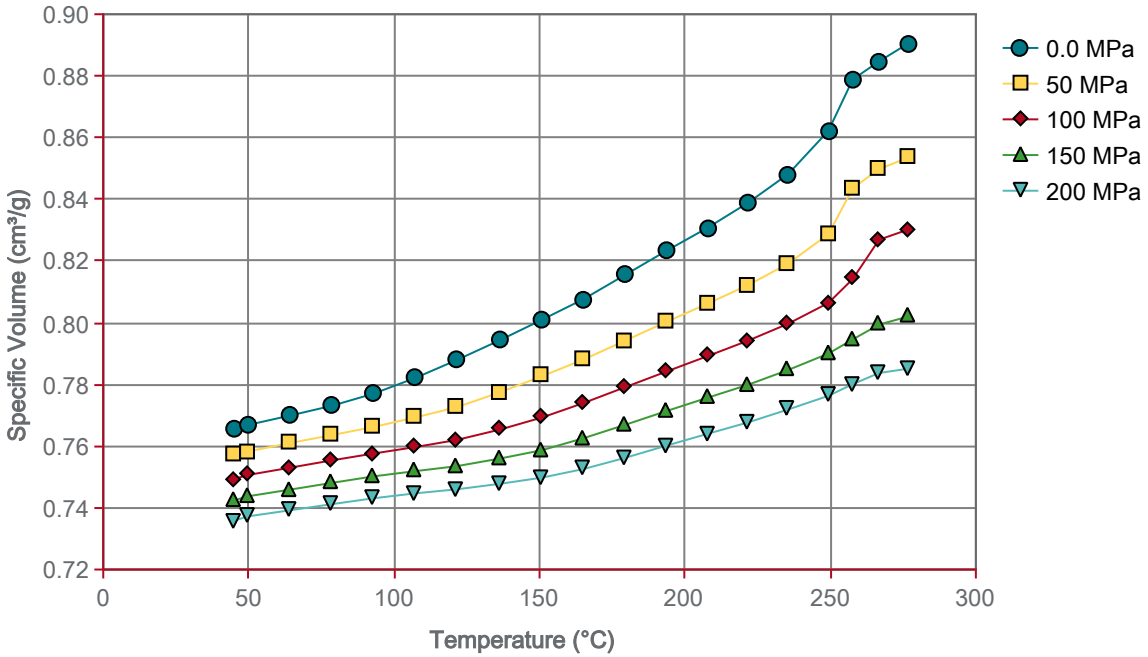
Specific Volume vs Temperature (ISO 11403-2)



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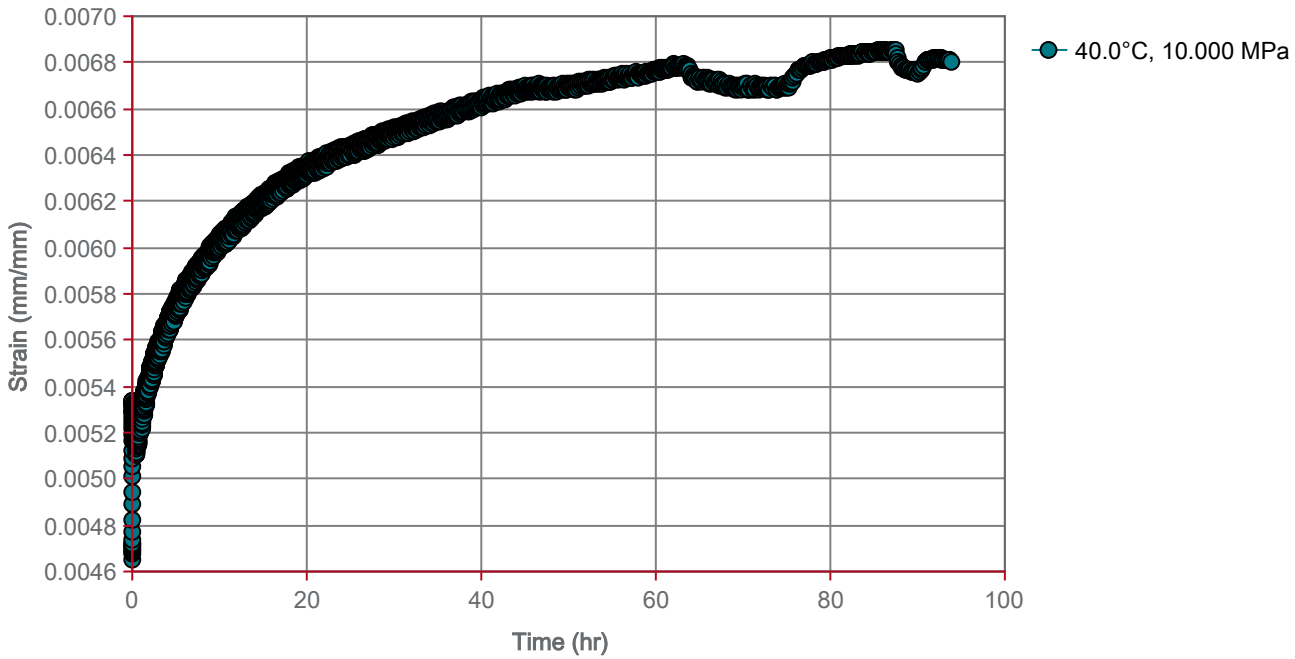
Tensile Creep (ASTM D2990)



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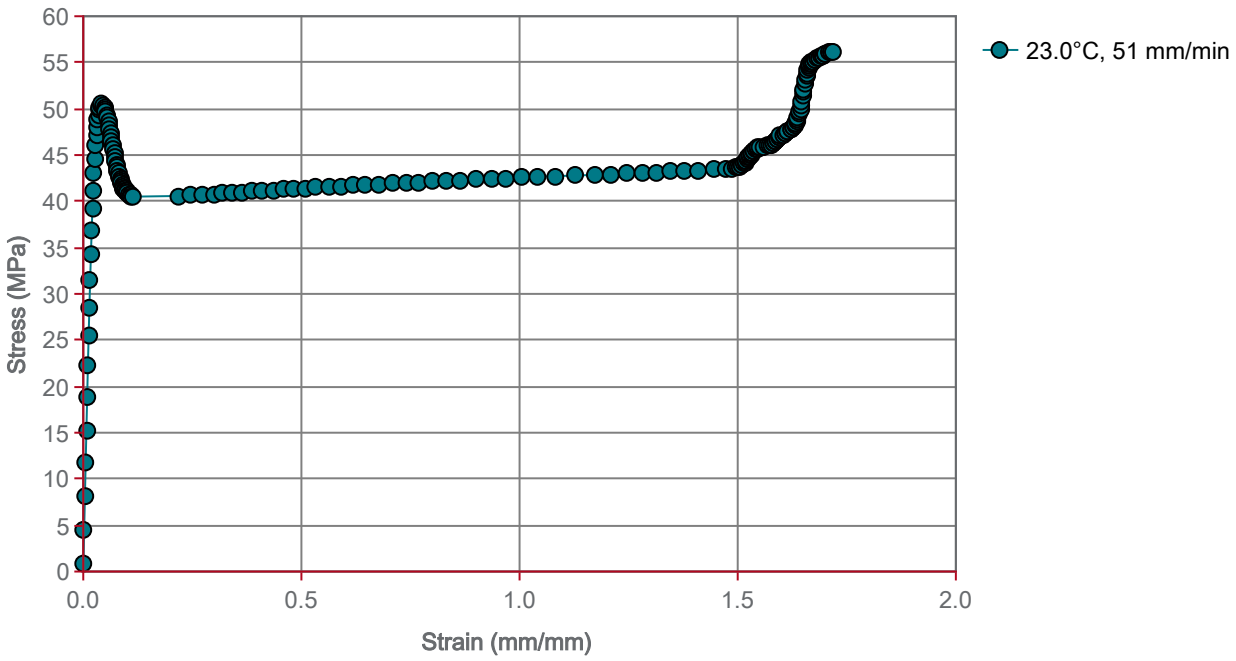
Tensile Stress vs. Strain (ASTM D638)



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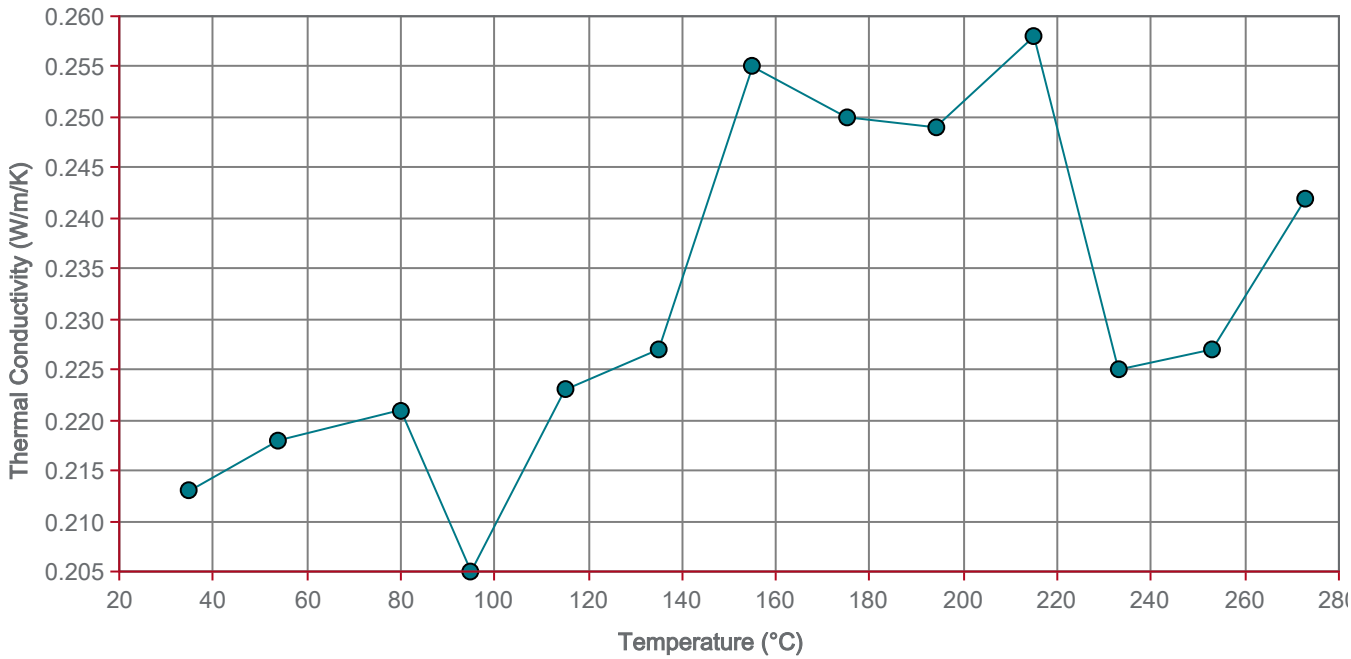
Thermal Conductivity vs. Temperature (ASTM E1530)



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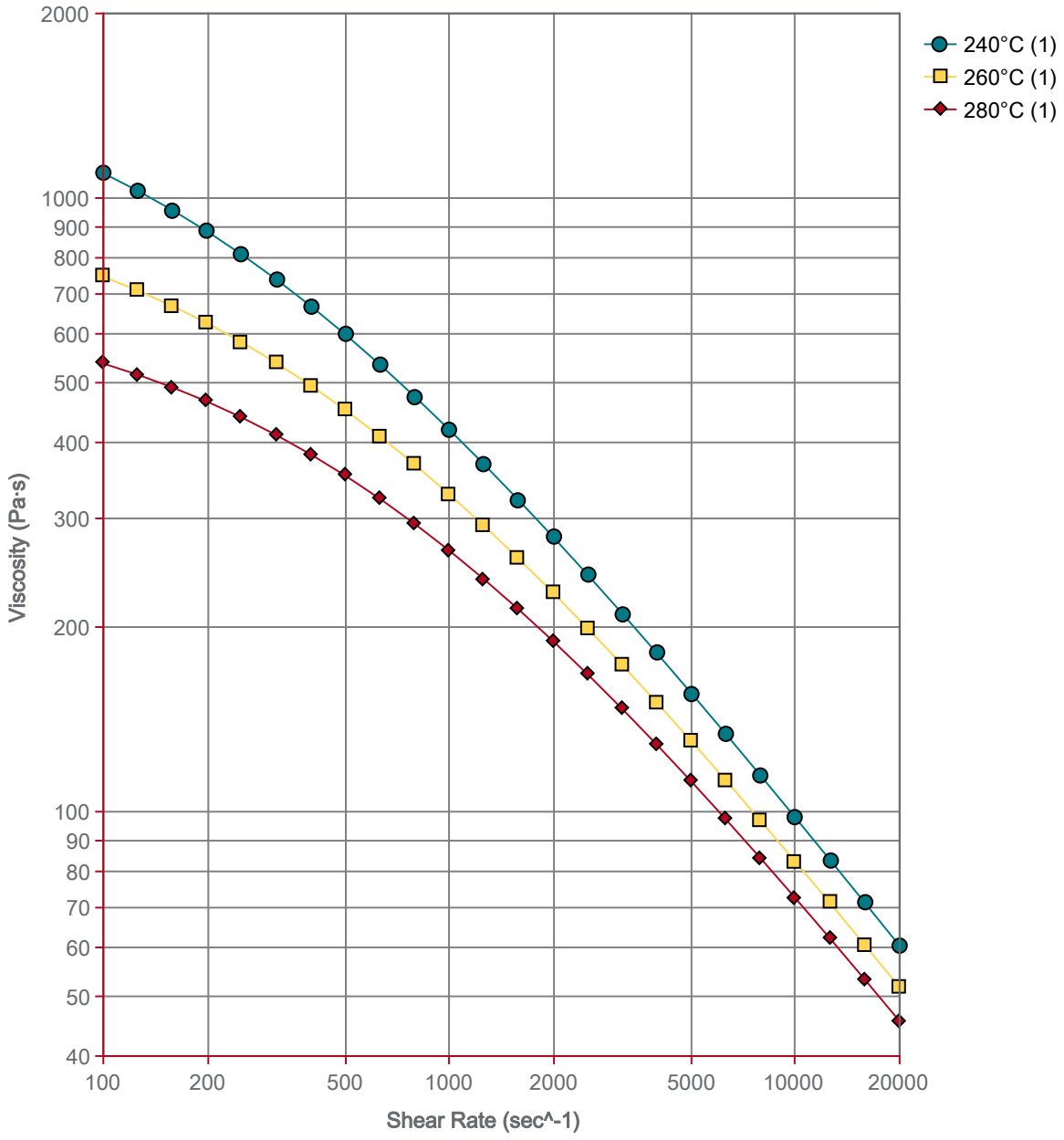
粘度与剪切率 (ASTM D3835)



数据备注

(1) - Rab. Corrected Data